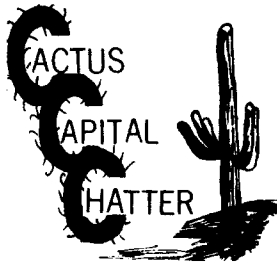


1968 CACTUS CAPITAL CHATTER  
SUBSCRIPTIONS DUE AT ONCE



Rates: Free to paid-up members of  
Tucson Cactus and Botanical  
Society.  
\$1.00 per year to addresses in  
U.S.A.  
\$1.50 per year to addresses in  
foreign countries

Copies of back issues of CACTUS CAP-  
ITAL CHATTER, 1965 through 1967, are  
always available.

20¢ per single copy  
75¢ per set of 4

Please make your checks payable to-  
Tucson Cactus and Botanical Society.

Josephine Shelby     Assistant Editors  
Editor             Dorothy Levering  
                      Lura Fuller    Lena Marvin  
                      Evangeline Scott

---

### DESERT SAFARI

---

---

VOLUME IV 1st Quarter 1968             No. 1

---

Mr. and Mrs. Alan Mollison, dedica-  
ted members of Tucson Cactus and  
Botanical Society, are unexcelled  
in their zeal in publicizing cacti  
and their beauty, among other desert

flora as well as the fauna of the region. Their efforts extend statewide as  
well as out-of-state. Alan shows his films and slides in clubs, schools, trail-  
er parks, organization meetings, and wherever else invited to do so. He gives  
Tucson Cactus and Botanical Society much fine publicity when he acknowledges  
his membership at his program.s

A record attendance at our January meeting, of 105 persons thrilled at the  
showing of his DESERT SAFARI.

The Cactus Club of El Centro, California invited our famed Mollisons to show  
their DESERT SAFARI at their December meeting. The Mollisons left Tucson early  
to keep this date so that they could pick up shots of Death Valley enroute.

000000  
000000

### PLANT AUCTIONS

The 1967 plant auction of Tucson Cactus and Botanical Society was another  
success. The October meeting featured this annual auction. We had 4 tables  
of plants--both cacti and other succulents. The new members had a "field day"  
and were able to bid on plants that were donated by members of our Society.  
This auction was a silent auction. Beside each plant container was a slip of  
paper on which the bids were written and by whom made. Auction Chairman, Alan  
Blackburn, was the only one who knew the time set for closing the bidding.  
Some plants had as many as ten bids by the same person, as some other persons  
kept raising the bid. In order to get a plant, it sometimes took that many bids  
to gain the highest bid when the gavel rapped at the end of the bidding period.

Acknowledgements: Tucson Cactus and Botanical Society has in Alan Blackburn  
a hardworking, enthusiastic, and devoted member to whom it is greatly indebted.  
Our Society is greatly indebted to another loyal member. We express our sin-  
cere gratitude to George Scannell, Tanque Verde Greenhouses, for his part in  
helping make the auction another success. His generous and varied donations  
of cacti certainly enhanced the entire exhibit and assured the success of that  
program.

## SUCCULENTS AFIELD

Some time ago, CHATTER editor asked the editor, Mrs. A. B. Turnwald, of Cactus & Succulent Society of New Zealand, if she would send us an article of interest pertaining to the world of succulents. Mrs. Turnwald asked Madge Shields of that Society to do this. Mrs. Shields is a well known writer in this field, and has sent the following article to be published in CHATTER. Tucson Cactus and Botanical Society thanks Madge Shields for her contribution.

Mrs. Turnwald reported in her letter to CHATTER that her organization was waiting to know what the New Zealand government was going to do about the narcotic plant, *Lophophara Williamsi* and *Lewinii*. Auckland, New Zealand winter climate allows lemons and oranges to thrive. This is comparable to Arizona winters in Phoenix and Yuma where citrus thrive, including grapefruit.

### SMALL GROWING COTYLEDONS

The smallest growing *Cotyledon* we had in our collections, years ago, before the hobby first hit this country, was *Cotyledon gracilis*, a dainty, creeping or pendant plant--according to how it was grown--with fat, triangular or half-closed-fan shaped leaves, crimped along the top edge. It coloured beautifully in full sun and produced attractive, small tiger-lily-like flowers with orange-red curled back petals and protruding stamens. Then when Jacobsen's three volumes became available, a picture of *Cotyledon jacobsoniana* threw doubt on the validity of the name of our small plant, as the flowers of the two plants seemed similar. So labels were altered. But a closer look at Jacobsen's picture revealed that though the flower looked the same, the leaves were decidedly different. So a doubt arose.

Later, in a plant exchange from America, I found a small plant with stiletto-like leaves. The name attached? *Cotyledon jacobsoniana*! So what was our plant? A piece sent to America didn't help, as it was not known there, so a cutting was sent to its native habitat--South Africa. Back came a very prompt reply--*Cotyledon gracilis*! So the oldtimers who had collections here long before our Society was born, knew more than we did, for their name is correct.

*Cotyledon jacobsoniana* has short stiletto-like leaves, blue-green and dusted with powder. It is a dainty little plant that creeps along the ground rooting as it goes, and is a decided asset to the *Cotyledon* group as it is small growing. It hasn't flowered yet, so whether the blossom is the same colour as that of *Cotyledon gracilis* is still not known

These two are not the only small growing *Cotyledons*. Two most interesting ones are *Coty. sinus-alexandri* and *Coty. schaeferianus*. These two plants have the same manner of growth, in that they are bare and leafless in summer, flower on the bare branches in early autumn and produce their leaves in winter, when they are watered. In summer when leafless they must be kept dry.

*Cotyledon sinus-alexandri* forms a little branching tree up to three inches in height and when the leaves appear they are about an inch in length, slightly flattened cylindrical, blue-green in colour, flecked all over with fine red markings. In February when the branches are bare and the plant looks quite lifeless, on the end of each branch a short stem appears which produces a little bright pink flower. The flower breaks from a small tube, the pink petals are wide and rounded, the reverse side being white. The stamens and stigma lobes do not protrude as they do in so many *Cotyledon* flowers. Some of the fallen leaves appear to be rooting, for at the base of the leaf a round ball has formed while white roots are forming on either side. This is interesting and rather wonderful.

The other small growing one, Coty. sinus-schaferianus has a controversial name as some authorities class it as an Adromischus, but as it has the same manner of growth as Coty. sinus-alexandri, I prefer to grow it with the Cotyledons rather than with the Adromischus. The plant is a little gem for it looks like a little mound of colourful mottled stones. Fat leaves appear from a silver stem just half an inch in length, so the plant is never more than an inch high. In winter the leaves were green, in spring bright red flecks adorned them, these becoming brighter and brighter as spring turned into early summer, then the stone-like leaves have a rusty colour, but now the plant is leafless, it looks as though it is dead. But this is not so for a tiny flower stem has just appeared and more are coming. The flower, held erect on its tiny stem, is pale pink with little pointed petals. Looking closely at the plant one can see the leaf buds swelling, so it won't be long now before this too is a charming little plant again.

.....MADGE SHIELDS

## ARIZONA'S WILD FLOWERS THAT MIGHT GROW IN YOUR GARDEN

Dr. Charles T. Mason, Jr., Curator of the Herbarium, The University of Arizona, presented a most suggestive and helpful talk to Tucson Cactus and Botanical Society at its November meeting. He explained how the following 33 plants, shrubs, and trees might be planted and cultivated in one's home garden in Tucson with varying degrees of success. His talk was illustrated with beautiful color slides of his subjects.

### FLOWERS FOR COLOR:

1. Anemone (*Anemone tuberosa*) Perennial, tuberous roots -8-12 inches-spring.
2. Mariposa Lily (*Calochortus kennedyi*) Perennial, bulb - 6-12 inches - spring- (Protected)
3. Columbine (*Aquilegia chrysantha*) Perennial - to 2 feet- spring-easily seeded (Protected)
4. Penstemon (*Penstemon parryi*) Perennial - 24 to 36 inches-spring-easily seeded.
5. Penstemon (*Penstemon barbatus*) Perennial - 24 to 36 inches - summer.
6. Verbena (*Verbena* sp.) Several species - Perennial - 6-12 inches - spring and summer.
7. Four-o'clock (*Mirabilis multiflora*) Perennial - Trailing - covering up to 5 feet in diameter - summer - full sun.
8. Desert Marigold (*Baileys multiradiata*) Perennial - 12 inches - most of the year - easily seeded.
9. Stachys (*Stachys coccinea*) Perennial - 12 to 18 inches - spring and early summer - easily seeded.
10. Globe mallow (*Sphaeralcea* sp.) Annual or perennial - 1-2 feet - spring and summer
11. Lupine (*Lupinus* sp.) several annual and perennial - 6-24 inches-spring and summer.
12. California Poppy (*Eschscholtzia mexicana*) weak perennial - 6-12 inches - spring-easily seeded.
13. Coral-bells (*Heuchera sanguinea*) Perennial - 12 to 18 inches - spring and early summer.
14. Streptanthus (*Streptanthus arizonicus*) Annual - 12 -18 inches-spring.
15. Desert zinnia (*Zinnia pumila*) local perennial - 8-12 inches - summer.
16. Desert zinnia (*Zinnia grandiflora*) Perennial - 8-12 inches - summer.
17. Melampodium (*Melampodium leucanthemum*) Perennial - 8-12 inches -spring and summer.
18. Dock (*Rumex hymenosepalus*) Perennial - tuberous roots - 2 feet - spring.
19. Fairy duster (*Calliandra eriophylla*) low shrub-spring - deciduous.
20. Desert Honeysuckle (*Anisacanthus thurberi*) - 3 feet-spring and summer-  
deciduous.

21. Brittle Bush (*Encelia farinosa*) - 3-4 feet - spring and summer.
  22. Wolf-berry (*lycium pallidum*) - 4 feet-flowers spring - deciduous.
  23. Trumpet Bush (*Tecoma stans*) 8 feet - flowers summer - frost sensitive.
  24. Fendlera (*fendlera rupicola*) 5-6 feet - spring - deciduous -(Protected).
  25. Pink Mimosa (*Minosa dysocarpa*) 5-6 feet - spring-spines-deciduous.
  26. White-thorn (*Acacia constricta*) 6-8 feet - deciduous - spring.
  27. Dalea (*Dalea greggii*) 3-6 feet - evergreen - spring.
  28. Desert willow (*Chilopsis linearis*) Tree to 25 feet - spring and summer.-  
deciduous.
  29. Locust (*Robinia neomexicana*) 10-12 feet - spring - deciduous.
  30. Sophora (*Sophora arizonica*) 5-6 feet -spring-fragrant - evergreen.
  31. Hopbush (*Dodonaea viscosa*) 6-12 feet - evergreen - foliage.
  32. Creosote-bush (*Larrea tridentata*) 6-12 feet - most of the year.
  33. Lignum vitae (*Guaiaecum coulteri*) deciduous - spring.
- 

## C O N S E R V A T I O N

### NATIONAL WILDERNESS PRESERVATION SYSTEM AND SYCAMORE CANYON

Mr. Dennis McCarthy, State Parks Director, recently sent CACTUS CAPITAL CHATTER the following information: "That site known as Sycamore Canyon Primitive Area in the Prescott and Coconino National Forests has been recommended by the Forest Service for inclusion in the National Wilderness Preservation System. This proposal has been backed by most conservation groups in the State, including the State Parks Board. In the not too distant future, Congress will, in all probability, declare this Sycamore Canyon into the National Wilderness System. Thank you for your interest in all phases of conservation". Approximately 47,000 acres will be included. This area is similar to beautiful Oak Creek Canyon but remains virtually untouched by human hands.

### THE DESERT BEAUTIFUL

Miss May Watrous of Tucson is an ardent conservationist. She presents her own individual convictions in the fields of conservation and desert landscaping, which we quote with her permission:

I drive very frequently to Green Valley along the Freeway and have been observing the landscaping which is excellent in most respects. At each intersection, however, I notice a large grass plot which in my opinion does not belong. Since the land is fenced off, and the grass can never be enjoyed by the people and children in the neighborhood, I feel this is a waste of our scarce ground water, and that other plants could be better used.

We live in an area of the most beautiful desert growth anywhere on earth. In a few years, much of it has been destroyed along the highways, and in a few more years, what will be left? Why are not our beautiful desert plants used in the landscaping, especially at these intersections where they could be well displayed? Some of our beautiful desert trees and shrubs could also be used along the roadway, such as catclaw, yucca, desert palo verde, etc.

I have only one more suggestion. The Tucson Mountains are most beautiful south of the city with their sharp peaks. I find them an inspiration and a source of delight as I drive along, particularly on a cloudy day. Yet right at the place where they are most beautiful, a row of eucalyptus has been planted which in time will completely shut out this view.

I drove through Tucson on my way to California in 1947. At that time, much beautiful desert growth grew along the Casa Grande Highway. Most of these plants are now gone. It was this beauty that decided me to come to Tucson to live. Many travelers coming through Southern Arizona would welcome a chance to see and admire our unique desert growth. The freeway planned to display these plants would give them an experience that no other state could equal and make their journey through Tucson a memorable one.

May Watrous  
3656 N. Mountain Ave., Tucson

-----

## ARIZONA NATIVE PLANT LAW

A member of Tucson Cactus and Botanical Society herewith presents some of his own impressions and convictions of this "confusing" law.

-----

We found ourselves driving in a remote area of the state, and the recent Arizona law on cacti was forcefully brought to mind. We left the main highway by a secondary blacktop road, traveled about twenty miles on it through a small town, and continued on it about five or six miles further. At that point the pavement stopped, and we drove onto a narrow gravel road. This continued for about three or four miles, at which point, with nothing ahead but forty miles of hilly desert, we saw all signs of constructions of a four lane divided highway.

The road on which we had been traveling on previous trips was suddenly the divider between the two two-lane roads, but this was not consistently so. The curves were being somewhat straightened, and the bulldozers and scrapers were busy pushing over the Joshua trees, scraping up the Stanley's opuntias, Johnston's barrels, hedgehog cacti, grizzly bears, beaver tails, and many other desert plants. These plants in a few places had been piled together, and an attempt had been made to burn some of them while still green -- of course without success. However, at most places they still lay where they fell, left to die.

Some of them, of course, could still recover where they had only been pushed over, or where time or rains might permit development of new roots, but the majority of them were lost. The area involved is not one which is noted for its rare or unusual plants, but we are sure that this factor was given no consideration by the Highway Department, and no other area would be so considered. This is the important and unfortunate part of the story.

We realized that we would not dare to try to save any of these plants because we would be fined for not having previous permission to get them and for not having given the state a half dollar apiece. Of course we are not clairvoyant, and so we would have had to name all varieties of desert plants in the area to cover those we might want, and pay for all varieties beforehand. This would have been difficult since a few days beforehand, we did not even know that we would be on that road at the time, nor that the road was to be "improved" between nowhere and nowhere at that very time.

We drove about fifteen or twenty miles over this "improvement" to an obscure crossroad where the work ended as abruptly as we had come upon it. As we proceeded on our way, our unpleasant thoughts were difficult to control. There had been a median strip and a right-of-way over which all plants were being removed, probably to be replaced by "suitable" shrubs from New England, Alaska or some tropical swamp. This is the usual pattern, at least. Any plant which is not native and has little chance of survival is normally used for this purpose, while those that would live are destroyed without mercy or exception, and regardless of scarcity, beauty, usefulness, or intrinsic value. At the same time, those who would preserve them are penalized by being refused permission to save them, except at personal cost.

The history of vanishing plants and animals is replete with irrefutable evidence of the white man's wanton disregard for otherlife. This is just another example of this disregard. Those who exhibit this characteristic are given a free hand to destroy at will, and those who do not are even restrained from expressing opinion.

We submit that the law under discussion is not really constitutional since it is preferential, favoring destruction and those who destroy while penalizing those who would preserve and who are lobbying for preservation. In addition, it permits wholesale destruction without recourse to even pity or mercy and places the State of Arizona in business as the profit-maker when individuals buy, sell, or trade their own personal property. It is as reasonable to require a permit to pick up rocks, or scorpions, or snakes, and charge for trading them as it is to enforce the present law on plants. A fair law would require everyone alike to get a permit and to pay for items traded or dug, and to save every one possible. Let's put yuccas and cacti in all median strips, on all berms, in all roadside parks, and along all property borders in new developments. Let's have the law say that they must have come from not more than five thousand feet from their transplanted location. Subsequent owners may want to sell, trade, or buy such items, but within the overall laws on merchandise, cacti should not be different from any other commodity.

.....Carl O. Horst  
0-----0

Natt M. Dodge of Sante Fe, New Mexico, writes for the Natural History Handbook Series. These Handbooks explain the natural history of scenic and scientific areas in the National Park System administered by the National Park Service of the United States Department of the Interior. Mr. Dodge wrote us: "Thank you for writing me relative to your wish to use the Saguaro National Monument Natural History Handbook as a source of material for "Cactus Capital Chatter". I feel honored that you find the material worthy of publication in "Chatter".

Purpose of the Natural History Handbooks is to provide the public with accurate information about features of the National Parks and Monuments so the National Park Service welcomes their use in whatever way most effectively serves their purpose. My objective in compiling the material for the handbook was to present the findings of research people in a form readily understandable to the "layman". So, you see, I am delighted that you plan on using some of it in "Chatter".

-----  
SAGUARO

The Saguaro of the Sonoran Desert is a remarkable plant. It survives and grows to tremendous size against what appear to be great odds--heat, scarcity of water, disease and the many animals that feed upon its fruits and seeds. Yet these, as well as the coolness of a desert evening and the freshness of an occasional rain, are the world of the saguaro.

For a saguaro, life begins when one of the seeds, having escaped the many creatures that feed upon them, sprouts in the shade of another desert plant. Thus, for the first years the plant may be hidden beneath the branches of a paloverde or a mesquite. At 5 years, the saguaro is only a few inches tall; at 30 years, a few feet; at 75, it may reach 15 or 20 feet, and about this time develops its first blunt branch.

The saguaro's stem is composed of a skeleton of 12 to 30 slender vertical ribs that support a mass of spongy tissues. Following a soaking rain (general rains between December and March, and local thunderstorms from July through September), the saguaro's shallow, widespread root system draws up immense quantities of water which are absorbed by the spongelike tissues. A mature plant,

weighing from 6 to 10 tons, may take up as much as a ton of water. During extended dry periods, the saguaro gradually uses its stored water, shrinking in girth and decreasing in weight.

In May and June, clusters of creamy-white flowers--the State Flower of Arizona--appear at the ends of the branches. These large, cup-shaped blossoms contain nectar which attracts the white-winged dove, and, at night, the longnose bat, as well as many insects. Thus, the fertility of the saguaro's seeds is insured: the dove's feathers, the bat's fur and whiskers, and the insect's transfer pollen from flower to flower.

Many birds eat the fruits and seeds of the saguaro while they are still on the branches, but most animals must wait until the fruits ripen, burst, and fall. On the ground, they are eaten by kangaroo rats, grasshopper mice, deer mice, pocket gophers, rock squirrels, and many other creatures. Occasionally, the fruits are eaten by larger animals--the mule deer, for example, or the collared peccary, the little wild pig of the desert.

In the Tucson Mountain section of the Saguaro National Monument, Papago Indians still harvest the fruits of the saguaro as they have done for countless generations. Some of the fruit they eat fresh; others they prepare into pressed, dried cakes, and syrup boiled from the juice. Park regulations prohibiting removal of fruit were relaxed so that the Papago could continue their ancient custom.

Apartment house of the desert, the saguaro provides a living place for several species of birds. The Gila woodpecker and the gilded flicker drill nest holes in the fleshy stems. Sap oozes from the exposed tissue, and a lining soon forms on the wall of the deep pocket, sealing off the precious moisture. After the Gila woodpeckers and the flickers have raised their young and flown away, other birds move in. Tiny, sparrow-sized elf owls, sparrow hawks, purple martins, and flycatchers make their homes in the abandoned pockets. Larger birds, such as red-tailed hawks and great horned owls, build their nests among the branches.

The saguaro sometimes reaches a height of 50 feet, with as many arms, and may live for 200 years. Most die earlier of disease or injury. With decay of the pulpy tissues, their gaunt yet sometimes graceful woody skeletons are left weathering in the dry desert air.

.....from "Saguaro", Saguaro National Monument, National Park Service.....

-----  
CACTUS CAPITAL CHATTER REPORT ON CIRCULATION ACTIVITIES  
DURING 1967

A Master List of subscribers to and recipients of CACTUS CAPITAL CHATTER is prepared first. This includes non-member subscribers, both individual and groups; complimentary recipients----individuals, other cactus societies; educational institutions; paid-up members of Tucson Cactus and Botanical Society.

The CHATTER staff then breaks down this Master List into the following sub-lists for prompt and efficient mailing purposes:

1. Tucson City Mailing List of 89 addresses in 1967 for paid-up members of our Society. 1968 will see changes in this list, due to: 1). Cancelling of some memberships. 2). Moving away from Arizona. 3). New members. 4). Lack of mailing instruction. 5). Deaths.

2. Green Valley, Arizona Mailing List of addresses in 1967 for paid-up members. The same change possibilities as above (Tucson) apply here for 1968.

3. Out-of-state Subscribers' Mailing List of addresses in North Dakota, New Mexico, Texas, California, Oregon, Florida and Wisconsin. This list changes continually.

4. Foreign Mailing List of paying subscribers and those receiving complimentary copies.
5. University of Arizona mailing list of complimentary copies to The Herbarium, The Library, The Arboretum of Desert Biology Station.
6. Tucson City Mailing list of non-member subscribers.

The CHATTER Mailing Department headed by Lura Fuller and assisted by Lena Marvin, holds the Tucson City and the Green Valley Mailing Lists which they work most efficiently and on time. The CHATTER editor holds copies of both these lists as very useful references, plus all the other Mailing Lists which she works for mailing. The editor continually must revise all the Mailing Lists, particularly the two local ones, due to the changes indicated in Item 1 above.

The next issue of CHATTER will include the MEMBERSHIP ROSTER of Tucson Cactus and Botanical Society. This Roster gives: 1)..Officers. 2). Board of Directors. 3). Committee Chairmen. 4)...Membership List of all who have paid their 1968 dues which are DUE NOW.

---

## A DESERT TRAIL

.....Hugh Sloan

What may we see on a desert trail  
 As we trod over shifting sands and shale?  
 Jack-rabbits running to and fro.  
 Overhead a Cooper's hawk circles low,  
 And over the desert there falls a hush.  
 Desert rats scamper for the brush.  
 Danger is sensed by birds in the trees.  
 Abruptly their songs and chatterings cease.  
 The hawk circles about and sails from view,  
 And soon the songs begin anew.

A deer stands motionless on a ridge nearby,  
 Outlined against a clear blue sky.  
 A thrasher perched in a mesquite tree  
 Graciously renders a soft melody.  
 A squirrel on a flat rock near his lair  
 Eats the dried seeds of a prickly pear.  
 In a narrow canyon we hear soft tones,  
 As a little stream trickles over the stones.  
 Nature has so many secrets to share  
 On desert trails 'most anywhere.

Hugh Sloan is a member of Tucson Cactus and Botanical Society and serves on its Board of Directors.

